Title (en)

Method for combining signals at wireless receivers in the absence of channel gain estimation and apparatus therefor

Title (de)

Verfahren zur Kombinierung von Signalen an drahtlosen Empfängern bei Nichtvorhandensein einer Kanalübertragungsschätzung und Vorrichtung dafür

Title (fr)

Procédé pour combiner les signaux sur des récepteurs sans fils en l'absence d'évaluation de gain de canal et appareil associé

Publication

EP 2214326 B8 20130619 (EN)

Application

EP 10152020 A 20100128

Priority

GR 20090100048 A 20090128

Abstract (en)

[origin: EP2214326A2] This invention relates to a method for combining signals received by a diversity receiver means comprising at least two branches, said signals transmitting symbols through a multi-paths channel, comprising the steps of combining (4) the signals after their processing in individual branches and demodulating and detecting the transmitted symbols. Said method is remarkable in that said processing comprises a co-phasing step (2) consisting of estimating the phase changes induced by the channel at the received signal, with reference to the transmitted signal, and weighting of each signal by a co-phasing coefficient based on said estimation, with all received signals being co-phased, and an optimization step consisting of estimating the mean value and the variance of the signal to noise ratio at said branch, using sampling techniques, and the weighting (3) of the received signals by an optimization coefficient calculated from said mean value and variance. It also relates to said diversity receiver.

IPC 8 full level

H04B 7/08 (2006.01); **H04B 1/707** (2011.01)

CPC (source: EP GR)

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